## **CLAIMS**

## I claim:

1. A synthetic urine solution consisting essentially of:

water having a pH between 3 and 10;

creatinine and a biocide, said creatinine and biocide dissolved within said water to form a solution exhibiting a specific gravity and said creatinine and biocide selected in relative concentrations to minimize sepsis; and

at least one dissociated ionic compound also dissolved within said solution to adjust the specific gravity of the solution to between 1.005 g/cm<sup>3</sup> and 1.025 g/cm<sup>3</sup>.

- 2. The synthetic urine solution of claim 1, also including urea dissolved within said solution.
- 3. The synthetic urine solution of claim 1, wherein said biocide is selected from the group consisting of an oxidizing biocide, an organic biocide and an in situ agent.
- 4. The synthetic urine solution of claim 1, wherein said at least one ionic compound is selected from the group consisting of carbonate salts, halide salts, hydroxide salts and bromides.
- 5. The synthetic urine solution of claim 4, wherein said biocide is selected from the group consisting of an oxidizing biocide, an organic biocide and an in situ agent.

- 6. The synthetic urine solution of claim 4, further including urea dissolved within said solution.
- 7. A method of manufacturing a synthetic urine solution comprising:

providing water;

dissolving creatinine and biocide into said water to form a solution exhibiting a specific gravity level, said creatinine and biocide being selected in relative concentrations to minimize sepsis;

adjusting said specific gravity level of said solution to between 1.005 g/cm<sup>3</sup> and 1.025 g/cm<sup>3</sup>, and if necessary, adjusting the pH level of the solution to between 3 and 10.

- 8. The method of claim 7 further comprising sealing said synthetic urine solution within a container so as to further minimize sepsis of said synthetic urine solution.
- 9. The method of claim 8 wherein said biocide is selected from the group consisting of an oxidizing biocide, an organic biocide and an in situ agent.
- 10. The method of claim 9 further comprising adding urea to said synthetic urine solution.
- 11. The method of claim 7 wherein said biocide is selected from the group consisting of an oxidizing biocide, an organic biocide and an in situ agent.
- 12. The method of claim 7 further comprising adding urea to said synthetic urine solution.

13. A method of manufacturing a synthetic urine solution comprising:

providing water having a pH between 3 and 10;

dissolving creatinine and at least one dissociating ionic compound in the water to form a solution exhibiting a specific gravity, said creatinine and at least one dissociating ionic compound selected in relative concentrations to adjust said specific gravity to between 1.005 g/cm<sup>3</sup> and 1.025 g/cm<sup>3</sup>; and

removing bacteria from said solution.

- 14. The method of claim 13 wherein the step of dissolving creatinine and at least one dissociating ionic compound also includes dissolving urea in the water, said urea selected in a concentration relative to that of said creatinine and at least one dissociating ionic compound so as to maintain the specific gravity of the solution between 1.005 g/cm<sup>3</sup> and 1.025 g/cm<sup>3</sup>.
- 15. The method of claim 14 further comprising the step of adding a biocide to said synthetic urine solution.
- 16. The method of claim 15 wherein said biocide is selected from the group consisting of an oxidizing biocide, an organic biocide and an in situ agent.
- 17. The method of claim 13 further comprising the steps of adding a biocide to the synthetic urine solution.

- 18. The method of claim 17 wherein said biocide is selected from the group consisting of an oxidizing biocide, an organic biocide and an in situ agent.
- 19. The method of claim 13, further comprising the step of sealing said synthetic urine solution within a container.
- 20. The method of claim 14, further comprising the step of sealing said synthetic urine solution within a container.